**679 ZWSTT 5.50.0 Attack in the start**

**FB ZWSTT 5.50.0 Funktionsbeschreibung**

This function calculates the ignition angle only during the start.  
After successful start (from B\_llrein) this function is switched off.  
The ignition angle is made up of the basic characteristic field KFZWSTZT, an offset above the rotational speed nmot  
and an offset depending on the intake air temperature tans.

**APP ZWSTT 5.50.0 Applikationshinweise**

In cold start very late Z¨undwinkel make sense. Background:

There is no high pressure during the cold start and high start enrichment factors are required.

This results in very long injection times.

In the case of BDE, however, only a specific angle window is available for the injection: Starting at a certain compression, the

the pressure in the combustion chamber was so great that combustion chamber gases would be blown back into the rail (only EKP pressure in the rail).

As a result, the injection must be canceled.

As the speed increases, the same angle window passes faster, leaving less time for injection

available. Consequently, the probability of an injection termination increases significantly with increasing speed.

In cold start, the injection times are usually so great that the injection must be stopped.

Due to the demolition can no longer be injected sufficient fuel, the result is often combustion misfires.

The risk of dropouts increases with increasing speed, as the angle window passes faster here (see above).

Investigations have shown that even after combustion, the combustion chamber is heated enough for the next combustion

significantly less fuel is required.

Due to these facts, the combustion chamber should be heated as quickly as possible during the start and the engine speed should increase

be limited. This can be done by late ignition angles.